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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,950	03/10/2004	Richard Emil Kajander	7338	4492

7590 11/23/2007
JOHNS MANVILLE
Legal Department
10100 West Ute Avenue
Littleton, CO 80127

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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11/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/796,950

Applicant(s)

KAJANDER, RICHARD EMIL

Examiner

Jill M. Gray

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-15, 23-25, 28, 31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20, 26, 27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on November 5, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/832,500 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, there is no clear antecedent basis for a pseudo polymer network. Claim 27 has its ultimate dependence upon independent claim 16. Neither claim 16 nor 26 set forth limitations with respect to a pseudo polymer network. Accordingly, the metes and bounds for which patent protection is being sought are not clear.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 16-20, 26-27, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Take et al., 4,645,548 (Take) in view of Chase et al., 3,948,673 (Chase).

Take is as set forth in the previous Office Actions and teaches gypsum board comprising a gypsum matrix having a top and bottom, wherein the gypsum matrix is of the type contemplated by applicants in claims 18 and 19, wherein the matrix has a first facer sheet placed on the bottom and a second facer sheet placed on the top, said facer sheets being paper, per claim 17, further teaching that glass fibers can be added, but does not specifically teach that the glass fibers are a glass fiber mat coated with silane. See entire document, and for example, abstract, column 2, lines 13-47, column 4, lines 62-63 and column 5, lines 28-40. Chase discloses a sizing for glass fibers which are combined with aqueous media such as cementitious products including gypsum. See column 1, lines 6-12. The sizing composition comprises a hydrophobic moiety and a hydrophilic moiety and may contain a silane is desired, as required by present claim 16. See column 8, lines 26-27 and Examples V and VI. In addition, Chase teaches that the glass fibers can be in the form of mats. See column 4, lines 50-55.

Glass fiber reinforcement of gypsum is well known in the art as evidenced by the teachings of Take and Chase. To modify the teachings of Take by using a glass fiber mat as taught by Chase would have been an obvious variant to the skilled artisan at the time the invention was made. As to claims 20, 27 and 29, Chase is silent as to the specific silane. Nevertheless, the inclusion of organosilanes in sizing compositions is well known in the sizing composition art based upon their ability to promote adhesion

and known function as coupling agents. Therefore, it is the position of the examiner that the inclusion of polymethylsiloxane in the sizing composition of the prior art, is no more than a preferential selection of one silane from among many being selected for its art recognized purpose. In the absence of factual evidence on this record of superior or unexpected properties in the resultant gypsum board that are directly related to the instant claimed polydimethylsiloxane, this limitation is not construed to be a matter of invention. Regarding claim 26, it would have been obvious to the skilled artisan to incorporate into the sizing composition a plurality of silane molecules to increase the adhesion of the glass fibers to the gypsum matrix. Regarding claim 30, this claim is drawn to the thickness of the size composition, which is related to the amount of add-on. It would have been obvious to one having ordinary skill in the art to adjust this amount during routine experimentation commensurate with the desired properties of the end product, such as the desired LOI, fiber breakage or pull-out. Accordingly, this requirement is not construed to be a limiting factor in the absence of factual evidence to the contrary.

Response to Arguments

6. Applicant's arguments with respect to claims 16-20, 26-27, and 29-30 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tagge et al., 6,955,844 B2. Tagge teaches gypsum boards

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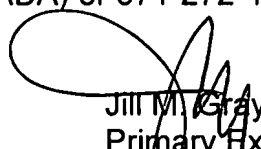
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comprising glass fiber mats sized with multifunctional polymers having both hydrophobic regions and hydrophilic regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill M. Gray
Primary Examiner
Art Unit 1794

jmg